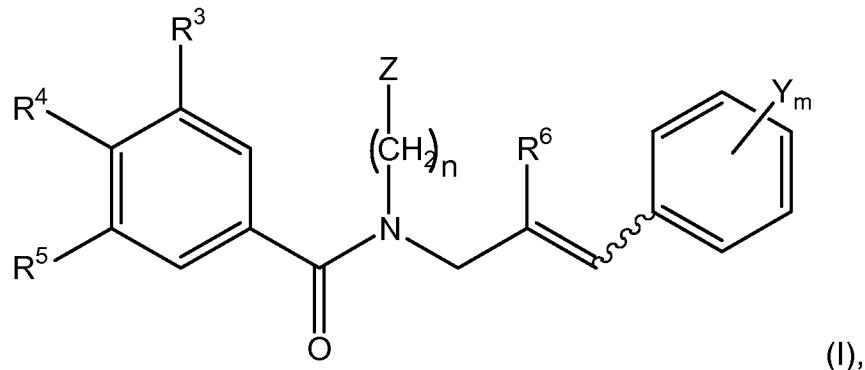


## I. Listing of Claims

Please amend the claims as follows (the changes in these claims are shown with ~~strikethrough~~ for deleted text and underlines for added text). A complete listing of the claims is listed below with proper claim identifiers. This listing of claims will replace all prior versions, and listings, of claims in the application.

What is claimed is:

1. (Currently Amended) A modulator of the structure (I), or a salt thereof:



where m is an integer from 1 to 5;

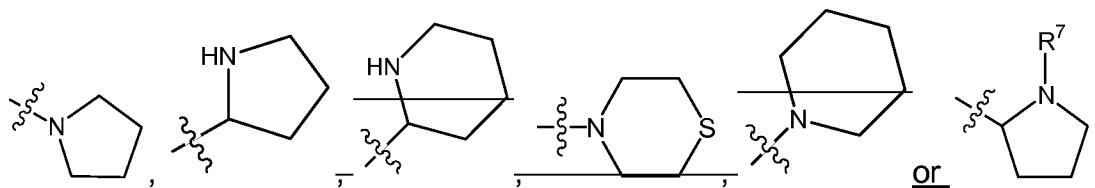
each Y is independently selected from the group consisting of hydrogen, halogen, -CN, -NO<sub>2</sub>, -OH, -OR', -C(O)R', -CO<sub>2</sub>R', -O(CO)R', -C(O)NR'R'', -OC(O)NR'R'', -SR', -SOR', -SO<sub>2</sub>R', -SO<sub>2</sub>NR'R'', -NR'R'', -NR'C(O)R'', -NR'C(O)<sub>2</sub>R'', -NR'SO<sub>2</sub>R'', -NR'(CO)NR''R'', unsubstituted or substituted C<sub>1-8</sub> alkyl, unsubstituted or substituted C<sub>2-8</sub> alkenyl, unsubstituted or substituted C<sub>2-8</sub> alkynyl, unsubstituted or substituted C<sub>3-8</sub> cycloalkyl, and unsubstituted or substituted C<sub>6-10</sub> aryl, ~~unsubstituted or substituted 5 to 10 membered heteroaryl, and unsubstituted or substituted 3 to 10 membered heterocyclyl~~;

where each R', R" and R'" are each independently from the group consisting of:

hydrogen, halogen, unsubstituted or substituted C<sub>1-8</sub> alkyl, and unsubstituted or substituted C<sub>6-10</sub> aryl, ~~unsubstituted or substituted 5- to 10-membered heteroaryl, and unsubstituted or substituted 3- to 10-membered heterocyclyl;~~

n is 0, 1, 2 or 3;

Z is a substituted or unsubstituted group of the formulae:



where R<sup>7</sup> is selected from the group consisting of hydrogen, -C(O)R', -CO<sub>2</sub>R', -C(O)NR'R'', -SO<sub>2</sub>R', unsubstituted or substituted C<sub>1-10</sub> alkyl, unsubstituted or substituted C<sub>1-8</sub> alkoxy, unsubstituted or substituted C<sub>2-10</sub> alkenyl, unsubstituted or substituted C<sub>2-10</sub> alkynyl, unsubstituted or substituted C<sub>3-10</sub> cycloalkyl, unsubstituted or substituted C<sub>6-10</sub> aryl, and C<sub>6-10</sub> aryloxy, where each R', R" and R''' are each independently from the group consisting of: hydrogen, halogen, unsubstituted or substituted C<sub>1-8</sub> alkyl, and unsubstituted or substituted C<sub>6-10</sub> aryl;

R<sup>6</sup> is alkyl, hydrogen, or halogen; and

R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup> are each independently selected from the group consisting of hydrogen, halogen, -CN, -NO<sub>2</sub>, -OH, -OR', -C(O)R', -CO<sub>2</sub>R', -O(CO)R', -C(O)NR'R'', -OC(O)NR'R'', -SR', -SOR', -SO<sub>2</sub>R', -SO<sub>2</sub>NR'R'', -NR'R'', -NR'C(O)R'', -NR'C(O)<sub>2</sub>R'', -NR'SO<sub>2</sub>R'', -NR'(CO)NR''R'', unsubstituted or substituted C<sub>1-8</sub> alkyl, unsubstituted or substituted C<sub>2-8</sub>

alkenyl, unsubstituted or substituted C<sub>2-8</sub> alkynyl, unsubstituted or substituted C<sub>3-8</sub> cycloalkyl, and unsubstituted or substituted C<sub>6-10</sub> aryl, unsubstituted or substituted 5 to 10 membered heteroaryl, and unsubstituted or substituted 3 to 10 membered heterocyclyl, or where any two of R<sub>3</sub>, R<sub>4</sub> or R<sub>5</sub> together with the atoms which they substituted form a substituted or unsubstituted 3 to 10 membered heterocyclyl.

2. (Previously Presented) The modulator of claim 1, where R<sup>6</sup> is hydrogen.
3. (Previously Presented) The modulator of claim 1, where R<sup>6</sup> is substituted or unsubstituted C<sub>1-8</sub> alkyl.
4. (Previously Presented) The modulator of claim 1, where R<sup>6</sup> is halogen.
5. (Previously Presented) The modulator of claim 1, where R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup> are each independently selected from the group consisting of hydrogen, -OR', and substituted or unsubstituted C<sub>1-8</sub> alkyl.
6. (Previously Presented) The modulator of claim 1, where R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup> are each independently selected from the group consisting of -OR' and hydrogen.
7. (Previously Presented) The modulator of claim 1, where R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup> are each -OR', where R' is substituted C<sub>1-8</sub> alkyl.

8. (Cancelled)

9. (Cancelled)

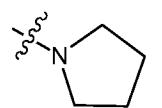
10. (Cancelled)

11. (Cancelled)

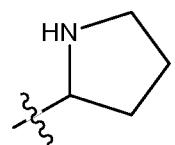
12. (Cancelled)

13. (Cancelled)

14. (Previously Presented) The modulator of claim 1, where Z is a substituted or unsubstituted group of the formula:



15. (Previously Presented) The modulator of claim 1, where Z is a substituted or unsubstituted group of the formula:

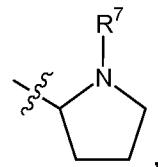


16. (Cancelled)

17. (Canceled)

18. (Canceled)

19. (Currently Amended) The modulator of claim 1, where Z is a substituted or unsubstituted group of the formula:



where R<sup>7</sup> is selected from the group consisting of hydrogen, -C(O)R', -CO<sub>2</sub>R', -C(O)NR'R'', -SO<sub>2</sub>R', unsubstituted or substituted C<sub>1-10</sub> alkyl, unsubstituted or substituted C<sub>1-8</sub> alkoxy, unsubstituted or substituted C<sub>2-10</sub> alkenyl, unsubstituted or substituted C<sub>2-10</sub> alkynyl, unsubstituted or substituted C<sub>3-10</sub> cycloalkyl, unsubstituted or substituted C<sub>6-10</sub> aryl, and C<sub>6-10</sub> aryloxy, unsubstituted or substituted 5 to 10 membered heteroaryl, and unsubstituted or substituted 3 to 10 membered heterocyclyl.

20. (Previously Presented) The modulator of claim 1, where R<sup>7</sup> is substituted or unsubstituted C<sub>1-10</sub> alkyl, substituted or unsubstituted C<sub>1-10</sub> alkoxy, substituted or unsubstituted aryloxy, or substituted or unsubstituted C<sub>3-10</sub> cycloalkyl.

21. (Original) The modulator of claim 1, where n is 1, 2, or 3.

22. (Previously Presented) The modulator of claim 1, where m is 1 or 2, and each Y is a halogen.

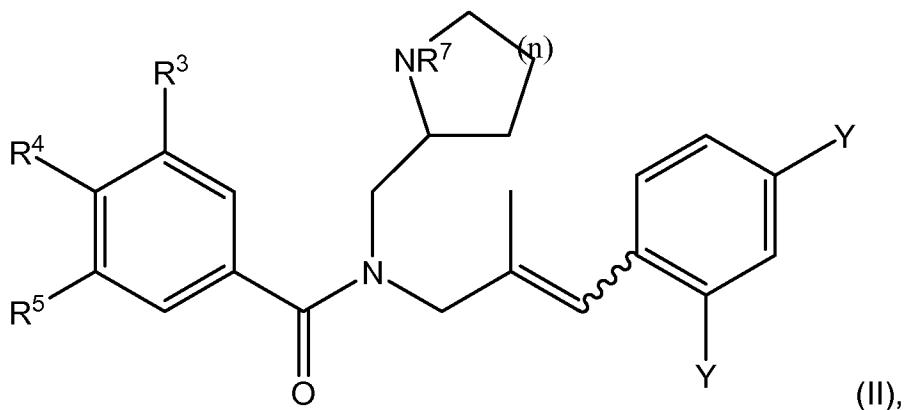
23. (Previously presented) The modulator of claim 1, where m is 0.

24. (Currently Amended) The modulator of claim 1, where substituted alkyl, substituted alkenyl, substituted alkynyl and substituted cycloalkyl can each independently be substituted 1 to 3 times with halogen, -OR', -NR'R'', -SR', -SiR'R''R'', -OC(O)R', -C(O)R', -CO<sub>2</sub>R', -CONR'R'', -OC(O)NR'R'', -NR''C(O)R', -NR'-C(O)NR''R'', -NR''C(O)<sub>2</sub>R', -S(O)R', -S(O)<sub>2</sub>R', -S(O)<sub>2</sub>NR'R'', -NR'S(O)<sub>2</sub>R'', -CN, oxo (=O or -O-) or -NO<sub>2</sub>, where R', R'' and R''' each are independently selected from the group consisting of hydrogen, halogen, unsubstituted C<sub>1-8</sub> alkyl, unsubstituted C<sub>3-6</sub> cycloalkyl, unsubstituted C<sub>2-8</sub> alkenyl, unsubstituted or C<sub>2-8</sub> alkynyl, and unsubstituted aryl, ~~unsubstituted heteroaryl, unsubstituted or substituted heterocyclyl.~~

25. (Currently Amended) The modulator of claim 1, where substituted aryl and ~~substituted heteroaryl~~ can each independently be substituted 1 to 3 times with halogen, unsubstituted or substituted alkyl, unsubstituted or substituted alkenyl, unsubstituted or substituted alkynyl, unsubstituted or substituted cycloalkyl, -OR', oxo (=O or -O), -OC(O)R', -NR'R'', -SR', -R', -CN, -NO<sub>2</sub>, -CO<sub>2</sub>R', -CONR'R'', -C(O)R', -OC(O)NR'R'', -NR''C(O)R', -NR''C(O)<sub>2</sub>R', -NR'-C(O)NR''R'', -NH-C(NH<sub>2</sub>)=NH, -NR'C(NH<sub>2</sub>)=NH, -NH-C(NH<sub>2</sub>)=NR', -S(O)R', -S(O)<sub>2</sub>R', -S(O)<sub>2</sub>NR'R'', -NR'S(O)<sub>2</sub>R'' and -N<sub>3</sub>, where R', R'' and R''' are independently selected from the group consisting of hydrogen, halogen, unsubstituted C<sub>1-8</sub> alkyl, unsubstituted C<sub>3-6</sub> cycloalkyl, unsubstituted C<sub>2-8</sub> alkenyl, unsubstituted C<sub>2-8</sub> alkynyl, and unsubstituted or substituted aryl, ~~unsubstituted heteroaryl, unsubstituted heterocyclyl.~~

26. (Currently Amended) The modulator of claim 1, where substituted heterocyclyl can be substituted 1 to 3 times with halogen, unsubstituted or substituted alkyl, unsubstituted or substituted alkenyl, unsubstituted or substituted alkynyl, unsubstituted or substituted cycloalkyl, -OR', oxo (=O or -O), -OC(O)R', -NR'R'', -SR', -R', -CN, -NO<sub>2</sub>, -OC(O)NR'R'', -NR''C(O)R', -NR''C(O)<sub>2</sub>R', -NR'-C(O)NR''R'', -NH-C(NH<sub>2</sub>)=NH, -NR'C(NH<sub>2</sub>)=NH, -NH-C(NH<sub>2</sub>)=NR', -S(O)R', -S(O)<sub>2</sub>NR'R'', -NR'S(O)<sub>2</sub>R'' and -N<sub>3</sub>, where R', R'' and R''' are independently selected from the group consisting of hydrogen, halogen, unsubstituted C<sub>1-8</sub> alkyl, unsubstituted or C<sub>3-6</sub> cycloalkyl, unsubstituted C<sub>2-8</sub> alkenyl, unsubstituted C<sub>2-8</sub> alkynyl, and unsubstituted aryl, ~~unsubstituted heteroaryl, unsubstituted heterocyclyl.~~

27. (Currently Amended) A modulator having the structure (II):



where n=0-4 n=1;

where each Y is independently hydrogen or halogen;

R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup> are each independently R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup> are each independently selected from the group consisting of hydrogen, halogen, and -OR';

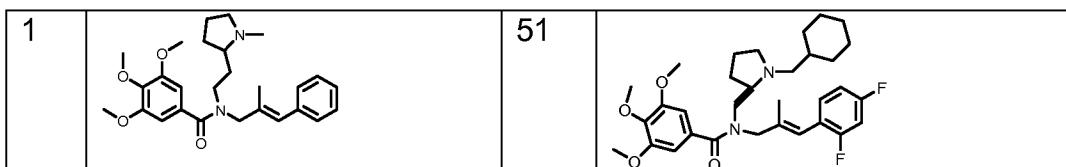
~~or any two of R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup>, together with the atoms which they substituted, form unsubstituted or substituted 3- to 10-membered heterocyclyl; and~~

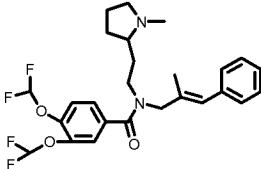
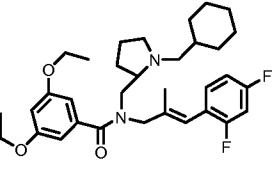
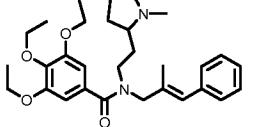
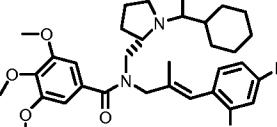
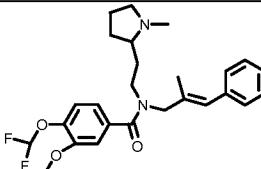
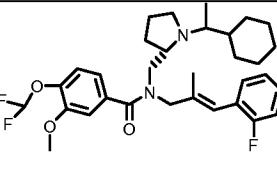
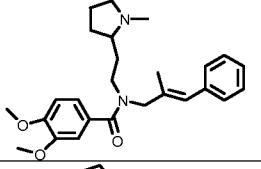
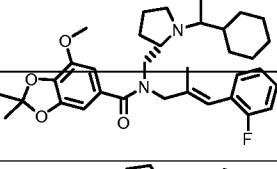
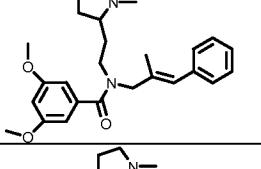
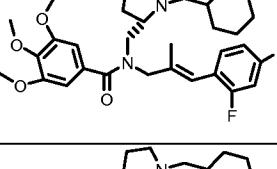
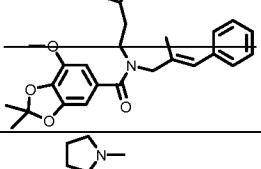
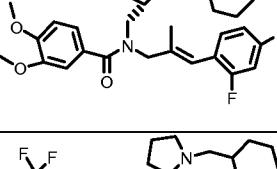
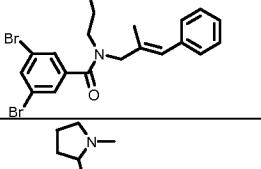
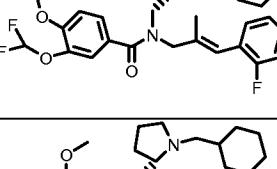
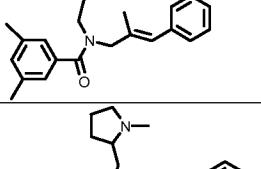
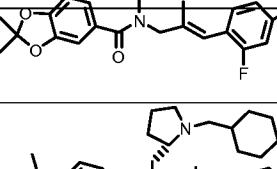
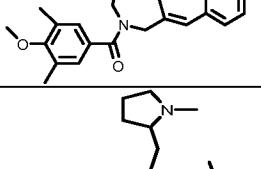
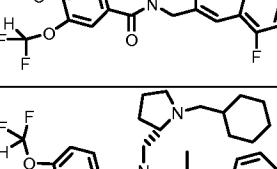
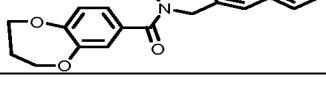
R<sup>7</sup> is selected from the group consisting of hydrogen, -C(O)R', -CO<sub>2</sub>R', -C(O)NR'R'', -SO<sub>2</sub>R', unsubstituted or substituted C<sub>1-8</sub> alkyl (optionally C<sub>1-8</sub> alkoxyalkyloxy, CH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>OMe)alkyl, unsubstituted or substituted C<sub>2-8</sub> alkenyl, unsubstituted or substituted C<sub>2-8</sub> alkynyl, unsubstituted or substituted C<sub>3-8</sub> cycloalkyl, and unsubstituted or substituted C<sub>6-10</sub> aryl, unsubstituted or substituted 5- to 10-membered heteroaryl, and unsubstituted or substituted 3- to 10-membered heterocyclyl, where each R', R'' and R''' are each independently from the group consisting of: hydrogen, halogen, unsubstituted or substituted C<sub>1-8</sub> alkyl, and unsubstituted or substituted C<sub>6-10</sub> aryl.

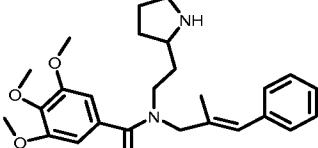
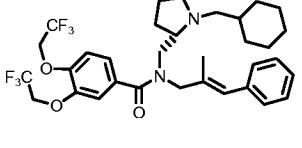
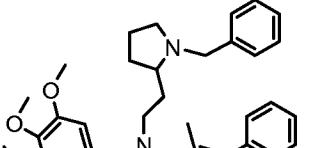
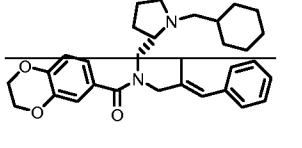
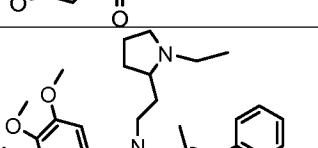
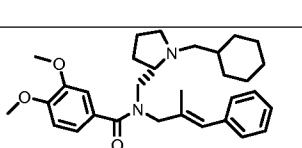
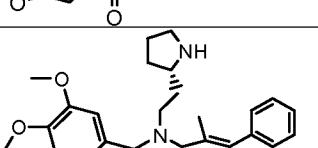
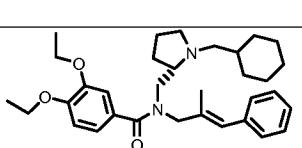
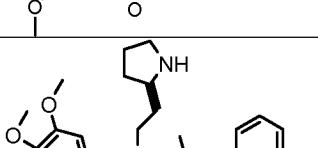
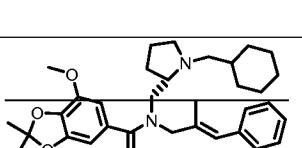
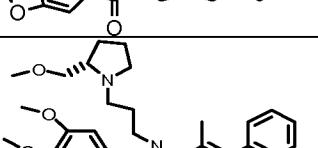
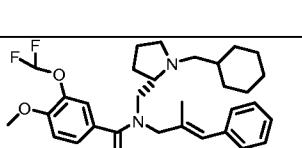
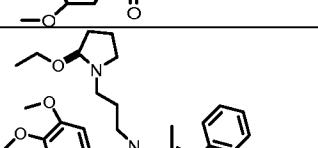
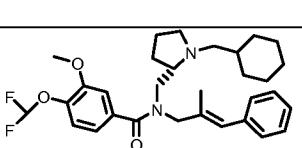
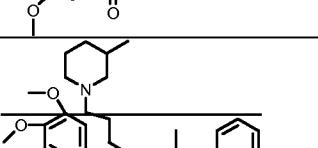
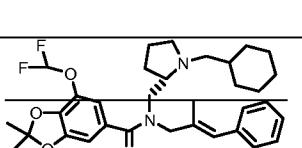
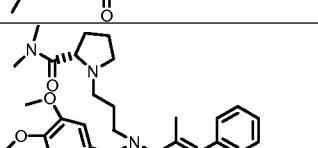
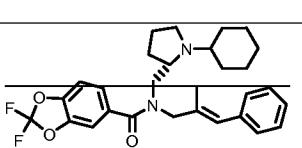
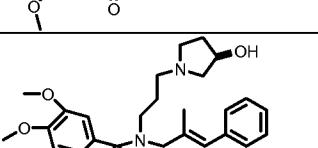
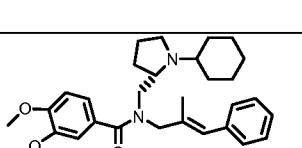
28. (Previously Presented) The modulator of claim 27, where R<sup>7</sup> is C<sub>1-8</sub> alkoxyalkyloxy.

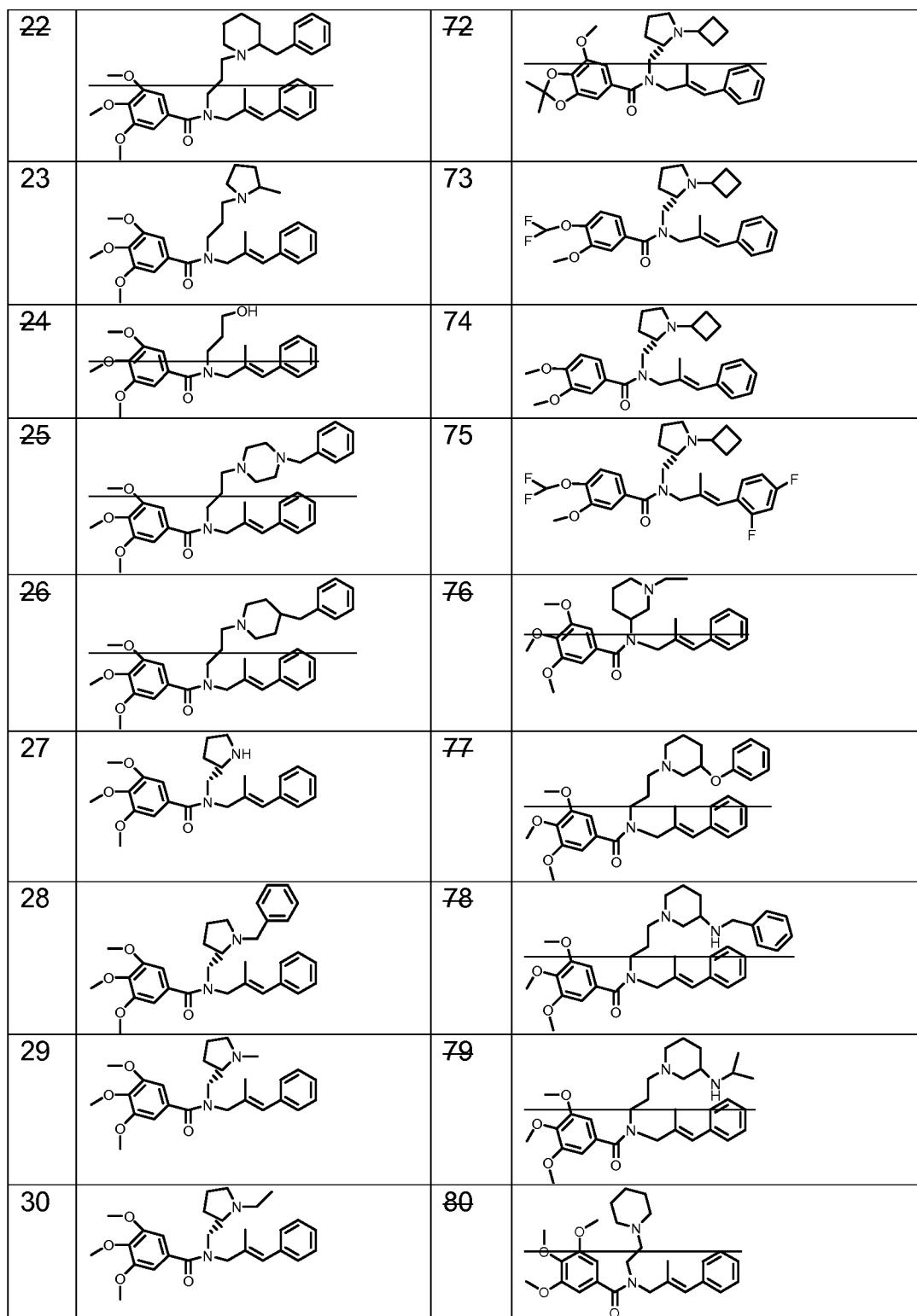
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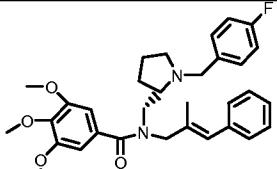
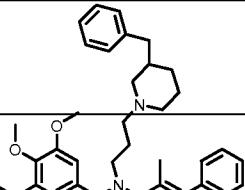
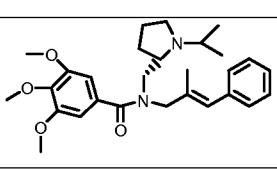
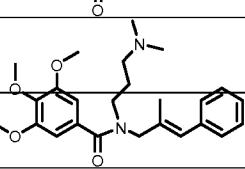
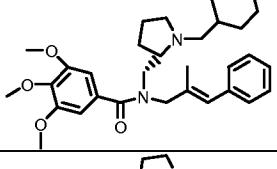
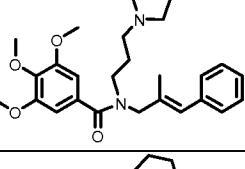
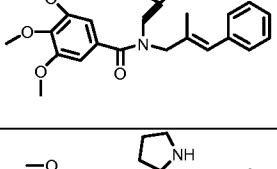
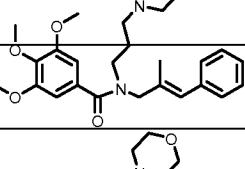
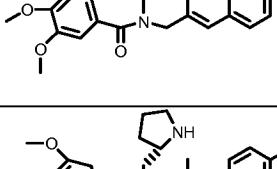
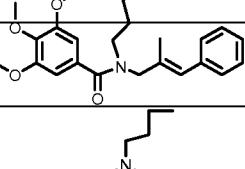
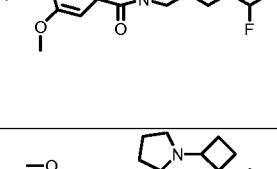
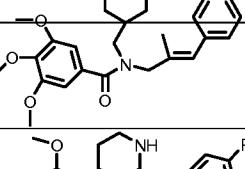
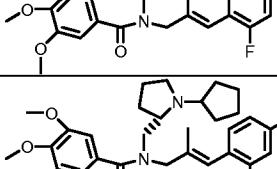
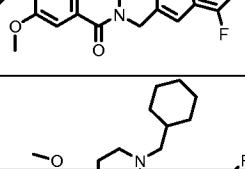
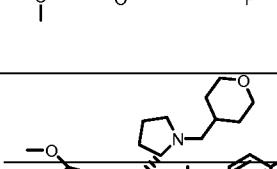
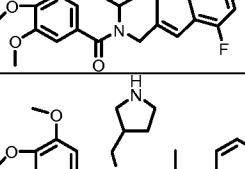
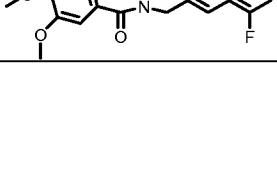
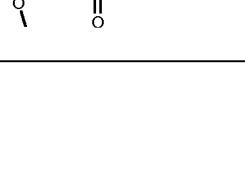
30. (Currently Amended) A modulator comprising one of the following formulae:

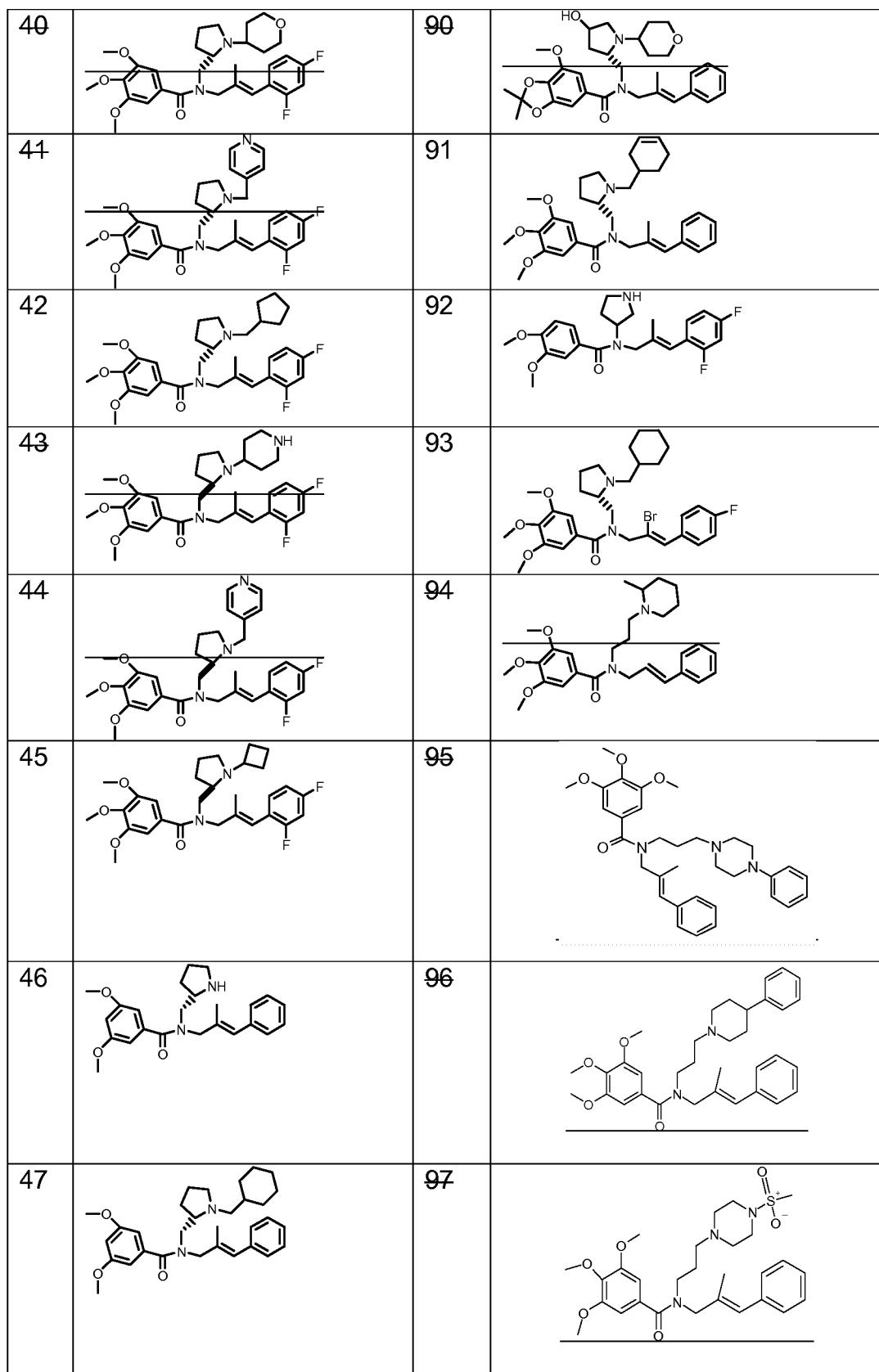


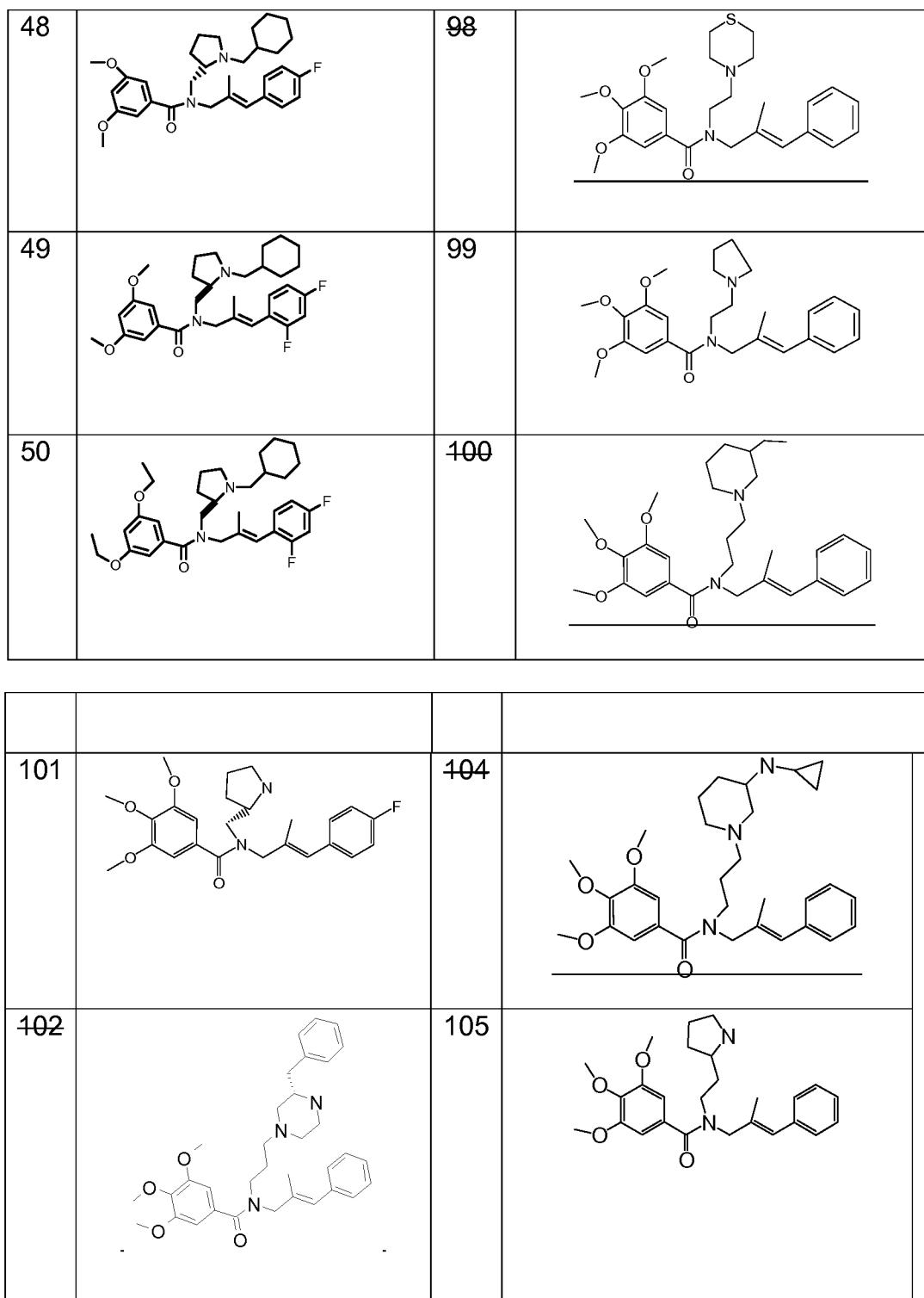
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3		53	
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11		61	

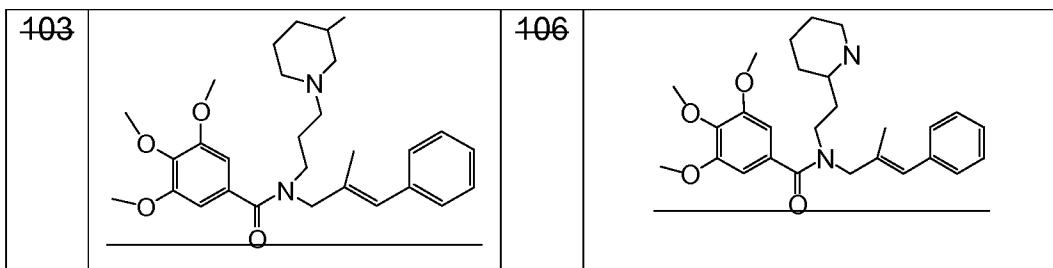
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19		69	
20		70	
21		71	



31		81	
32		82	
33		83	
34		84	
35		85	
36		86	
37		87	
38		88	
39		89	







31. (Previously Presented) A pharmaceutical composition comprising the modulator of claim 1 and a pharmaceutically acceptable carrier.

32. (Original) A pharmaceutical composition comprising the modulator of claim 27 and a pharmaceutically acceptable carrier.

33. (Withdrawn) A pharmaceutical composition comprising the modulator of claim 30 and a pharmaceutically acceptable carrier.

34. (Canceled)

35. (Withdrawn-Currently Amended) A method of inhibiting the binding of chemokines I-TAC and/or SDF-1 to a CCXCKR2 receptor, comprising contacting the composition of claim 34 33 with a cell that expresses the CCXCKR2 receptor for a time sufficient to inhibit the binding of the chemokines to the CCXCKR2 receptor.

36. (Withdrawn) A method of inhibiting the binding of chemokines I-TAC and/or SDF-1 to a CCXCKR2 receptor, comprising contacting the modulator of claim 1

with a cell that expresses the CCXCKR2 receptor for a time sufficient to inhibit the binding of the chemokines to the CCXCKR2 receptor.

37. (Withdrawn-Currently Amended) A method of treating cancer, comprising administering a therapeutically effective amount of the composition of claim 34 33 to a cancer patient for a time sufficient to treat the cancer.

38. (Withdrawn) A method of treating cancer, comprising administering a therapeutically effective amount of the modulator of claim 1 to a cancer patient for a time sufficient to treat the cancer.